

- Note 1 X means uncertain status.
- Note 2 When screw or adjust the antenna, please note that only the metal part can be touched, and do not screw the plastic part, otherwise the antenna may be damaged.
- Note 3 If the equipment still fails to work upon above solutions, please contact your device customer service.



H:Contact

If any technical problems, please contact us, with the following information in hand:

- ◆ Device model
- ◆ Serial number of product

Ningbo Ginlong Technologies Co., Ltd.

No. 57 Jintong Road, Binhai Industrial Park
Xiangshan, Ningbo, Zhejiang, 315712, P.R.China
Tel: +86 (0)574 6578 1806
Fax: +86 (0)574 6578 1606
Email: info@ginlong.com
Web: www.ginlong.com

Please record the serial number of your monitor and quote this when you contact us.



Quick Guide

Data Logging Box WiFi GL-WE01

Version: 1.2

From this page

Data Logging Box WiFi is an external data logger in the Ginlong monitoring series.

By connecting with single or multiple inverters through RS485/422 interface, the Kit can collect information of PV/wind systems from inverters. With the integrated WiFi function, the Kit can connect to router and transmit data to the web server, realizing remote monitoring for users. In addition, Ethernet is also available for connection to router, enabling transmission of data.

Users can check the runtime status of the device by checking the 4 LEDs on the panel, indicating Power, 485/422, Link and Status respectively.

A : Unpack

B : Install data logger

C : Connect data logger and inverters

D : Network setting

E : Register on Ginlongmonitoring website

F : Log in Ginlongmonitoring website to manage power station

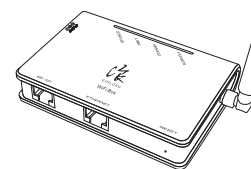
G : Trouble shootings

This Quick Guide is intended to assist users in quick installation and start of Data Logging Box WiFi. If any problem, please refer to corresponding chapters of [WiFi Box User Manual](#) for details.

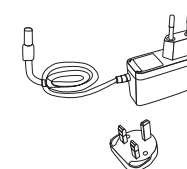
A:Unpack

1. Checklist

After unpacking the box, please make sure all the items are contained as follows:



① 1 PV/wind data logger (Data Logging Box WiFi)



② 1 power adapter with European or British plug



③ 2 screws

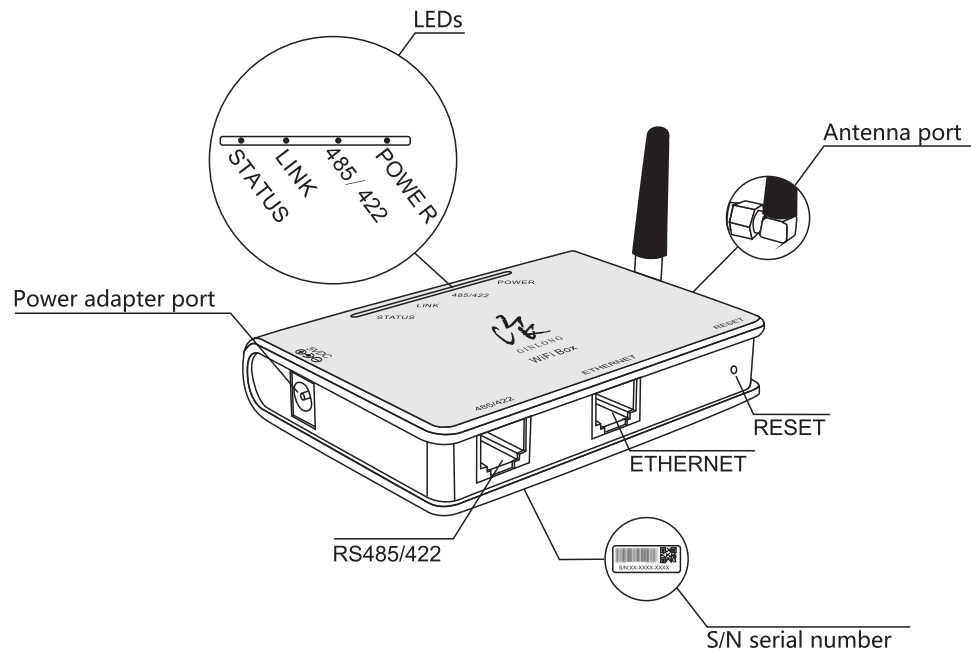


④ 2 expandable rubber hoses



⑤ 1 Quick Guide

2. Interface and connection



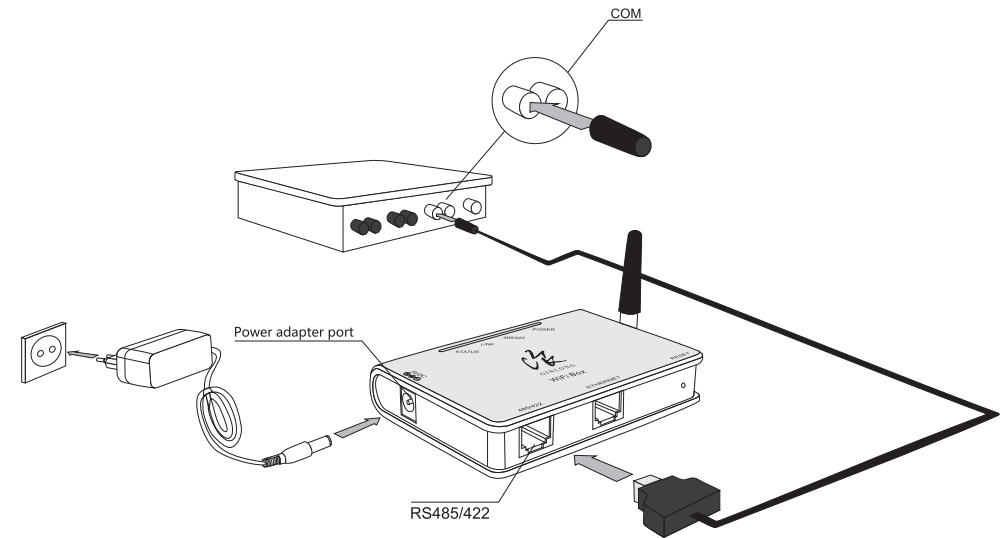
B: Install data logger

WiFi Box can be either wall-mounted or flatwise.

C: Connect data logger and inverters

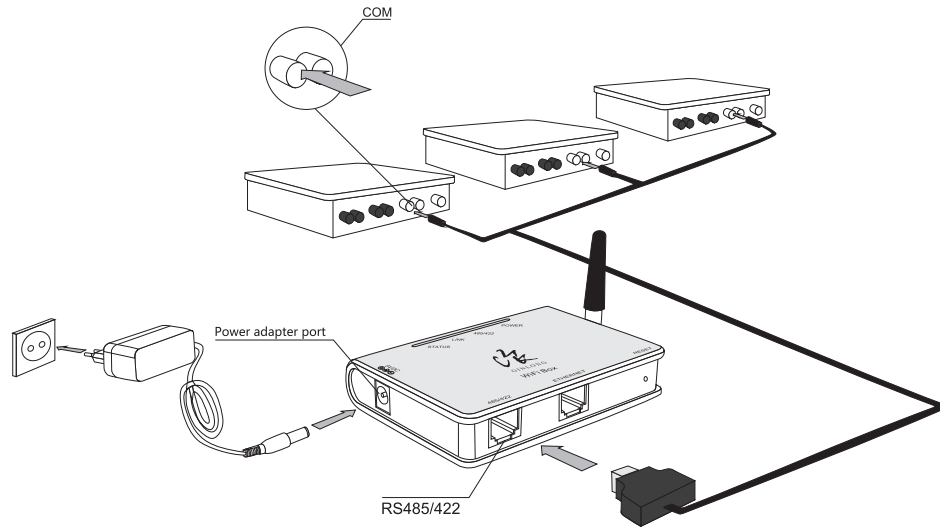
Notice: Power supply of inverters must be cut off before connection. Make sure that all connections are completed, then power the data logger and inverters, otherwise personal injury or equipment damage may be caused.

1. Connection with single inverter



Connect inverter and data logger with 485 cable, and connect data logger and power supply with power adapter.

2. Connection with multiple inverters



- 1.Parallel connect multiple inverters with 485 cables.
- 2.Connect all inverters to data logger with 485 cables.
- 3.Set different address for each inverter. For example, when connecting three inverters, the address of first inverter must be set as "01", the second must be set as "02", and the third must be set as "03" and so on.
- 4.Connect data logger to power supply with power adapter.

3. Confirm connection

When all connections are finished and with the power on for about 1 minute, check the 4 LEDs. If POWER and STATUS are permanently on, and LINK and 485/422 are permanently on or flashing, connections are successful. If any problems, please refer to G:Debug.

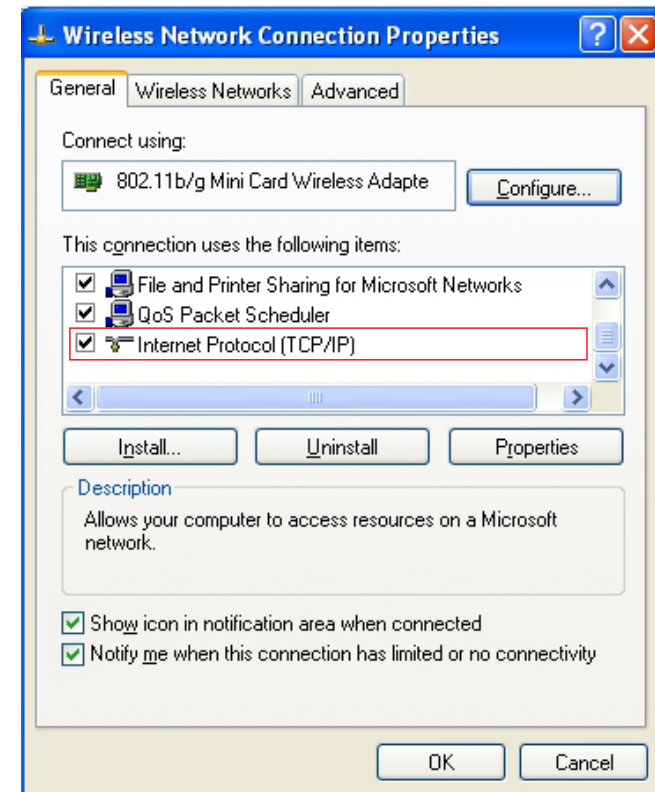
D:Network setting

WiFi Box can transfer information via either WiFi or Ethernet, users may choose the appropriate method accordingly.

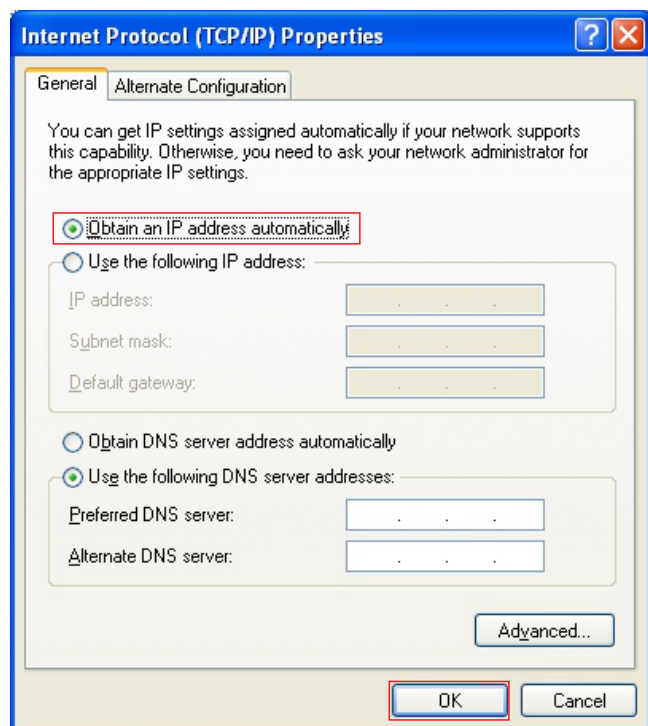
I. Connection via WiFi

Notice: The setting hereinafter is operated with Window XP for reference only. If other operating systems are used, please follow the corresponding procedures.

1. Prepare a computer or device, e.g. tablet PC and smartphone, that enables WiFi.
2. Obtain an IP address automatically
 - ① Open [Wireless Network Connection Properties](#), double click [Internet Protocol \(TCP/IP\)](#).

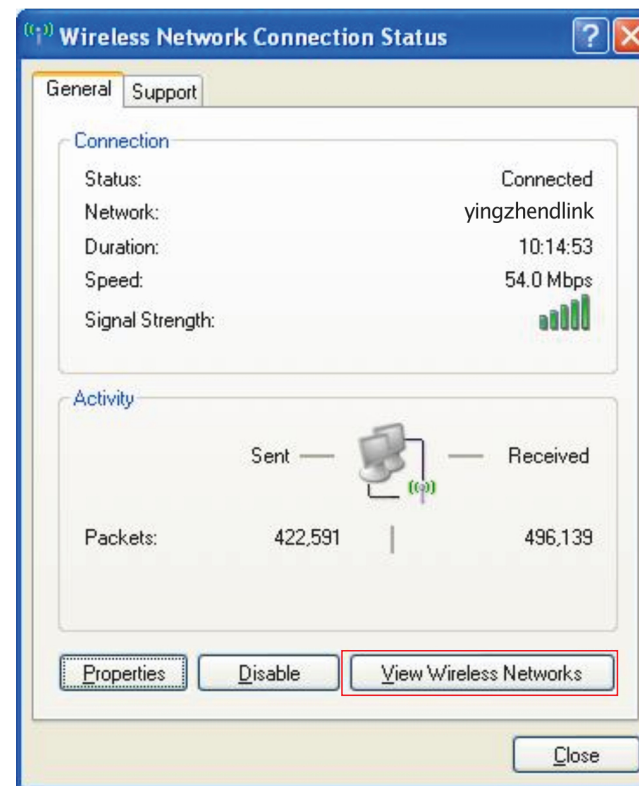


- ② Select **Obtain an IP address automatically**, and click **OK**.

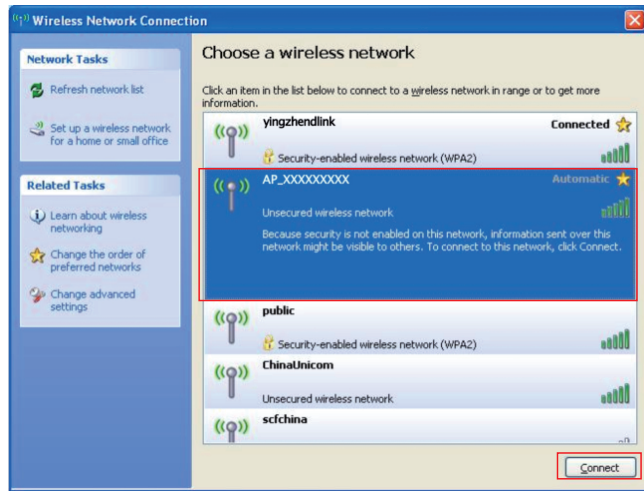


3. Set WiFi connection to the data logger

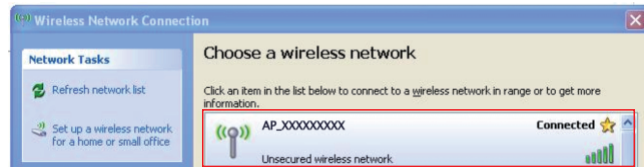
- ① Open wireless network connection and click **View Wireless Networks**.



- ② Select wireless network of the data logging module, no passwords required as default. The network name consists of **AP** and the **serial number of the product**. Then click **Connect**.



- ③ Connection successful.

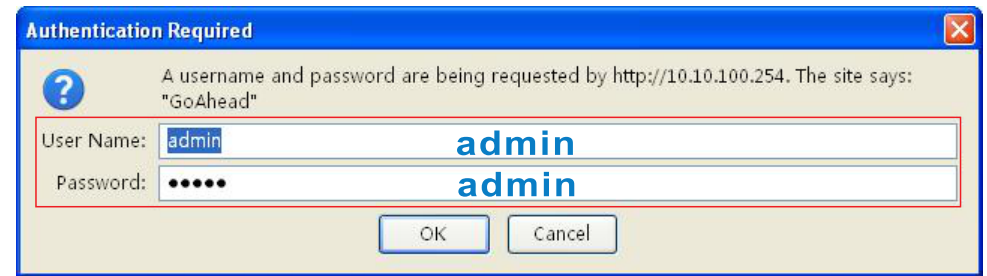
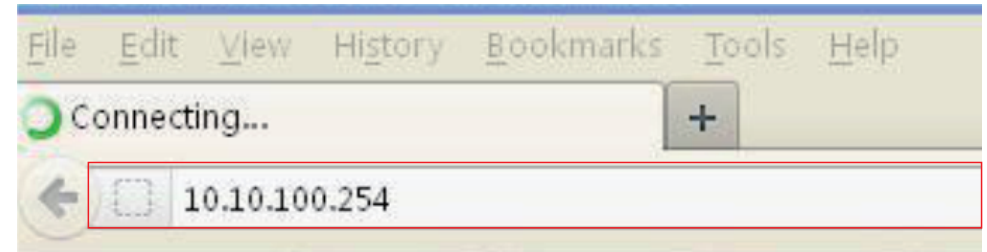


Notice: If **AP_(serial number of product)** is not available in the wireless network list, there may be problems in the connection or setting of data logging. Please refer to 5. Debug of User Manual for troubleshooting.

4. Set parameters of data logger

- (a) Open a web browser, and enter **10.10.100.254**, then fill in username and password, both of which are **admin** as default.

Supported browsers: Internet Explorer 8+, Google Chrome 15+, Firefox 10+



- (b) In the configuration interface of data logger, you can view general information of the data logger.

Follow the setup wizard to start quick setting.

① Click **Wizard** to start.

The screenshot shows the 'Device information' section of the setup wizard. On the left, a sidebar menu has 'Wizard' highlighted. The main content area displays various device details:

- Device serial number:** 501292599
- Firmware version:** S-W01 V2.0.4A(ginlong)
- Wireless AP mode:** Enable
- SSID:** AP_501292599
- IP address:** 10.10.100.254
- MAC address:** AC:CF:23:10:F3:58
- Wireless STA mode:** Disable
- Router SSID:** (empty)
- Signal Quality:** (empty)
- IP address:** (empty)
- MAC address:** (empty)
- Cable mode:** Enable
- IP address:** 0.0.0.0
- MAC address:** AC:CF:23:10:F3:5B

Below this is the 'Remote server information' section, which is currently collapsed. A 'Help' box on the right explains that the device can be used as a wireless access point (AP mode) or a wireless information terminal (STA mode) to connect to a remote server via a wireless router. It also notes that if AP mode is turned off or STA mode is on while STA mode is off, the device can only be connected to a remote server through a cable network.

② Click **Start** to continue.

The screenshot shows the 'Dear user' screen of the setup wizard. The sidebar menu has 'Wizard' highlighted. The main content area contains a message:

Dear user:

Thank you for choosing our device. Next, you can follow the setup wizard to complete the network setting step by step, or you can select the left menu for detailed setting.

*Note: Before setting, please make sure that your wireless or cable network is working.

A 'Start' button is located at the bottom right of the main content area. A progress indicator at the bottom shows steps 1 through 6, with step 1 being the current step.

A 'Help' box on the right states: 'The setup wizard will assist you to complete the device setting within one minute.'

③ Select **Wireless connection**, and click **Next**.

The screenshot shows the 'Network connection' screen of the setup wizard. The sidebar menu has 'Wizard' highlighted. The main content area displays the 'Network connection:' section with two options:

- Wireless connection**
- Cable connection

The 'Wireless' option is selected, and a dropdown menu next to it shows 'Wireless' and 'Enabled'. Below the options are 'Back' and 'Next' buttons. A progress indicator at the bottom shows steps 1 through 6, with step 2 being the current step.

A 'Help' box on the right explains that the STA mode of wireless connection will be turned off by the system automatically when the user chooses cable network connection. It also notes that whether to keep the AP mode of wireless connection on or off can be set by turning on or off the wireless function.

④ Click **Refresh** to search available wireless networks, or add it manually.

The screenshot shows the 'Please select your current wireless network:' screen of the setup wizard. The sidebar menu has 'Wizard' highlighted. The main content area displays a 'Site Survey' table with columns for SSID, BSSID, RSSI, and Channel. Below the table is a 'Refresh' button. There is also a section for 'Add wireless network manually:' with input fields for 'Network name (SSID) (Note: case sensitive)', 'Encryption method', and 'Encryption algorithm'. The 'Network name (SSID)' field contains 'dlink', 'Encryption method' is set to 'WPA2PSK', and 'Encryption algorithm' is set to 'TKIP'. 'Back' and 'Next' buttons are at the bottom. A progress indicator at the bottom shows steps 1 through 6, with step 3 being the current step.

A 'Help' box on the right explains that this step will help connect the device to a desired WLAN. It advises that if the user does not find their wireless router in the list, they should refresh several times or add it manually. It also notes that the user should check their wireless router for the right encryption method and encryption algorithm. A final note states: 'If your wireless router does not broadcast SSID, please set the desired wireless network in Wireless interface.'

- ⑤ Select the wireless network you need to connect, then click **Next**.

Notice: If the signal strength (RSSI) of the selected network is <10%, which means unstable connection, please adjust the antenna of the router, or use a repeater to enhance the signal.

Please select your current wireless network:

Site Survey	SSID	BSSID	RSSI	Channel
<input checked="" type="radio"/>	dlink	14:d6:4d:75:71:a0	85%	8

*Note: When RSSI of the selected WiFi network is lower than 15%, the connection may be unstable, please select other available network or shorten the distance between the device and router.

Add wireless network manually:

Network name (SSID) (Note: case sensitive):

Encryption method:

Encryption algorithm:

- ⑥ Enter the password for the selected network, then click **Next**.

Please enter the wireless network password:

Password (8-64 bytes) (Note: case sensitive):

Re-enter password:

Show Password

Back Next

- ⑦ Select **Enable** to obtain an IP address automatically, then click **Next**.

Please fill in the following information:

Obtain an IP address automatically:

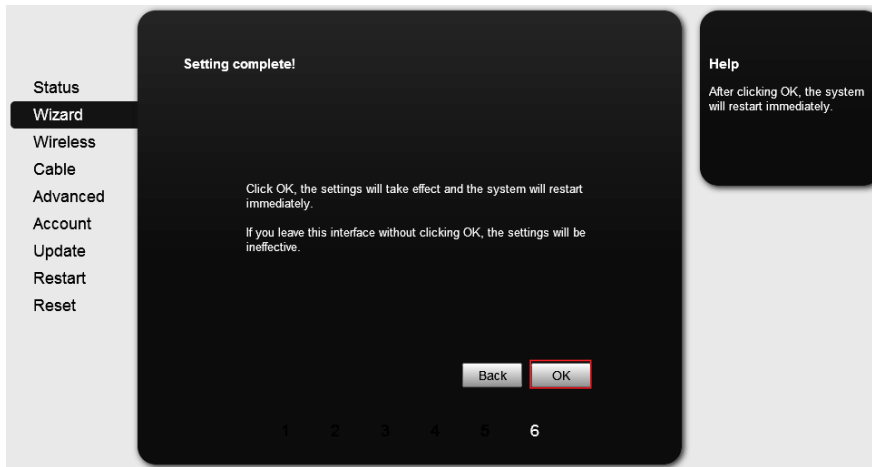
IP address:

Subnet mask:

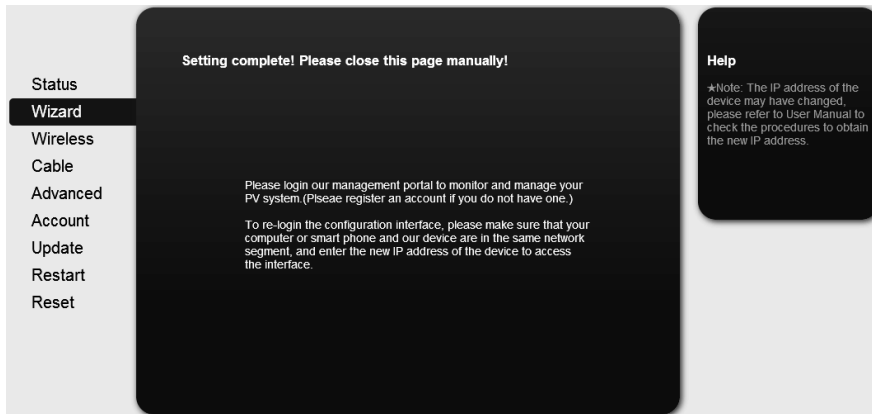
Gateway address:

DNS server address:

⑧ If setting is successful, the following page will display. Click **OK** to restart.



⑨ If restart is successful, the following page will display.



Notice: After setting is completed, if STATUS is permanently on after about 30 seconds, and the 4 LEDs are all on after 2-5 minutes, the connection is successful. If STATUS is flashing, which means unsuccessful connection, please repeat the setting from step 3.

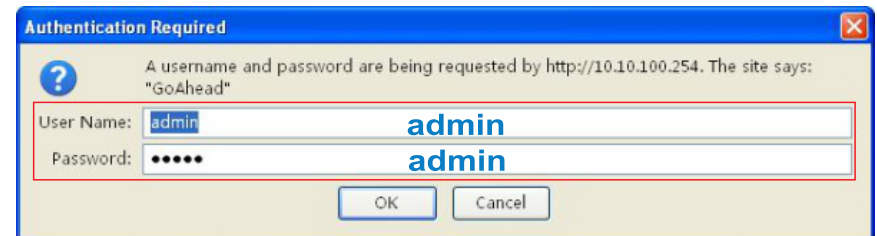
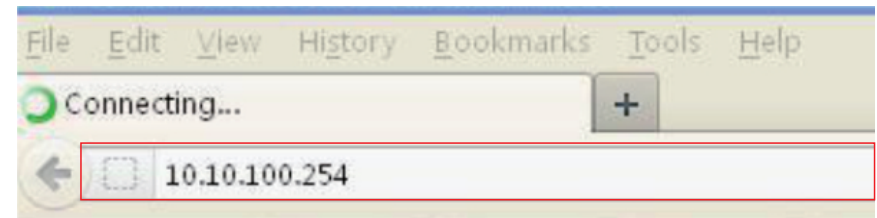
II.Connection via Ethernet

1. Connect router and data logger via Ethernet port with network cable .
2. Reset the data logger.

Reset: Press the reset button with a needle or open paper clip and hold for a while when the 4 LEDs should be on. Reset is successful when 3 LEDs, except POWER, turn off.

3. Enter the configuration interface of your router, and check the IP address of the data logger assigned by the router. Open a web browser and enter the assigned IP address to get access to the configuration interface of the data logger. Fill in username and password, both of which are **admin** as default.

Supported browsers: Internet Explorer 8+, Google Chrome 15+, Firefox 10+

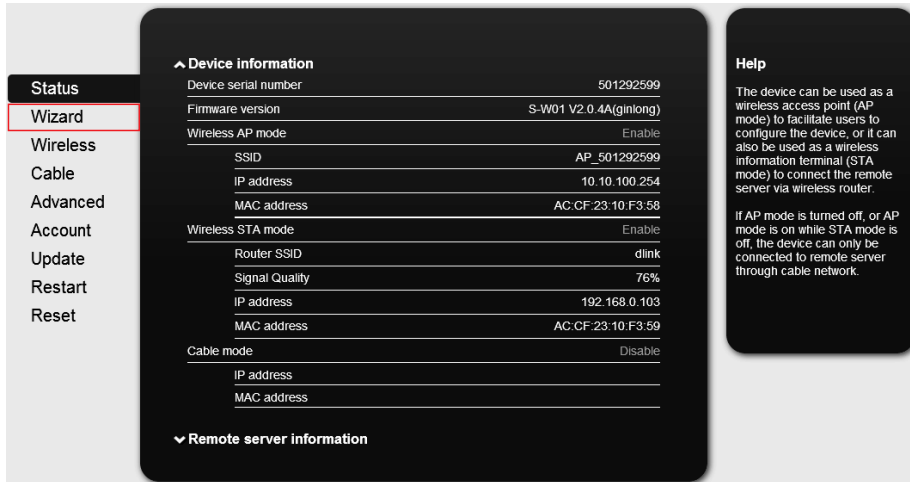


4. Set parameters of data logger

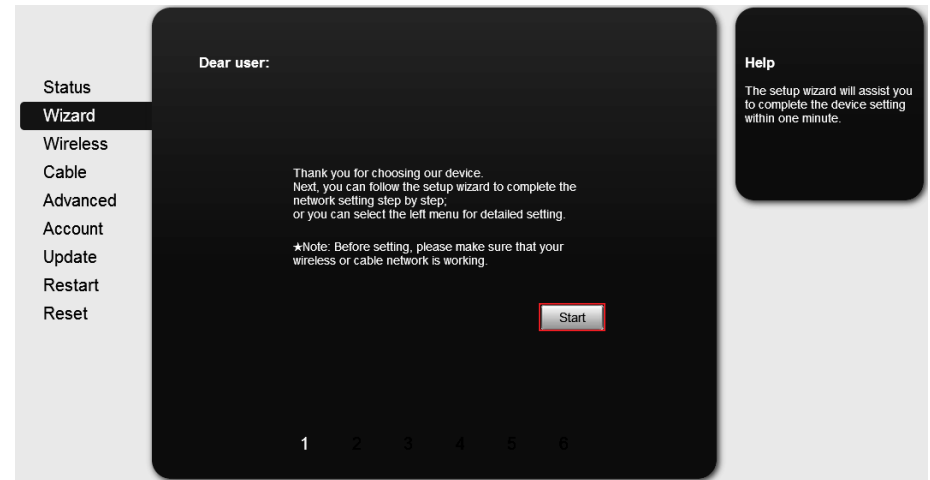
In the configuration interface of data logger, you can view general information of the device.

Follow the setup wizard to start quick setting.

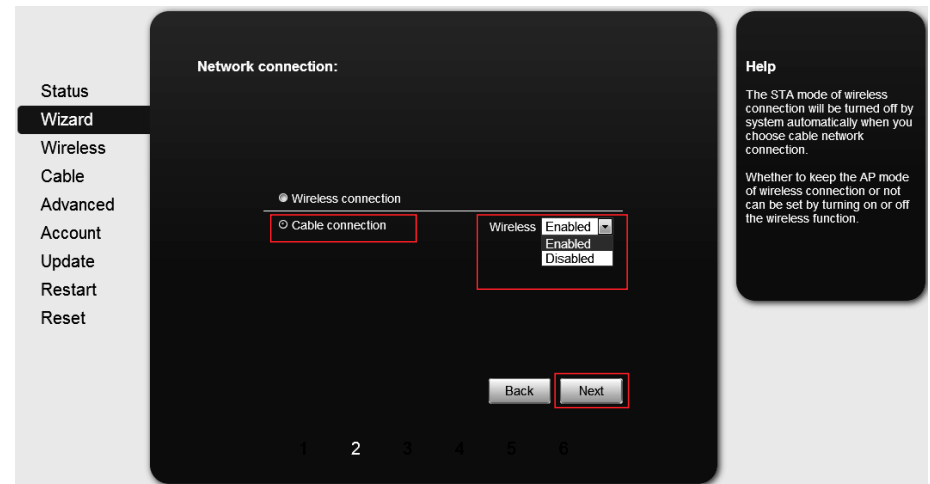
① Click **Wizard** to start .



② Click **Start** to continue.



③ Select **Cable Connection**, and you can choose to enable or disable the wireless function, then click **Next**.



- ④ Select **Enable** to obtain an IP address automatically, then click **Next**.

Please fill in the following information:

Obtain an IP address automatically	Enable
IP address	0.0.0.0
Subnet mask	0.0.0.0
Gateway address	0.0.0.0
DNS server address	

Back Next

1 2 3 4 5 6

Help
Most systems support the function of DHCP to obtain IP address automatically. Please select disable and add it manually if your router does not support such function.

- ⑥ If restart is successful, the following page will display.

Setting complete! Please close this page manually!

Back Next

Help
*Note: The IP address of the device may have changed, please refer to User Manual to check the procedures to obtain the new IP address.

- ⑤ If setting is successful, the following page will display. Click **OK** to restart.

Setting complete!

Click OK, the settings will take effect and the system will restart immediately.
If you leave this interface without clicking OK, the settings will be ineffective.

Back OK

1 2 3 4 5 6

Help
After clicking OK, the system will restart immediately.

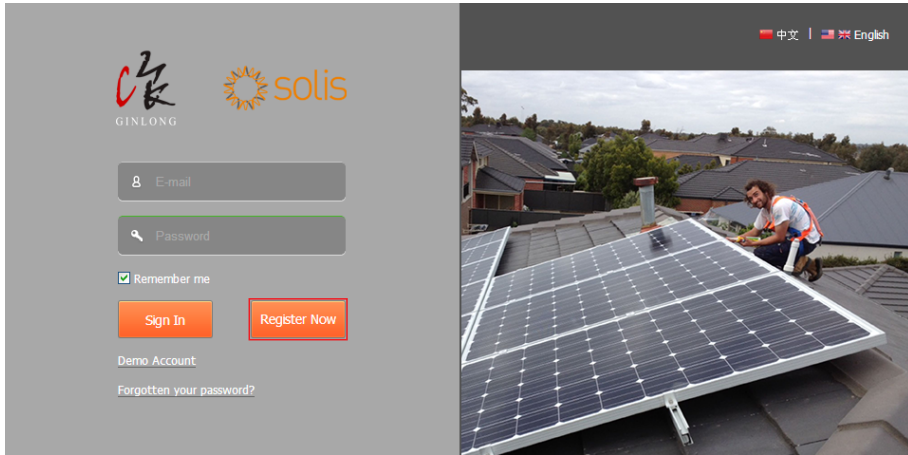
Notice: After setting is completed, **if STATUS is permanently on after about 30 seconds, and the 4 LEDs are all on after 2-5 minutes, the connection is successful.** If STATUS is flashing, which means unsuccessful connection, please repeat the setting from step 3.

E:Register on Ginlongmonitoring

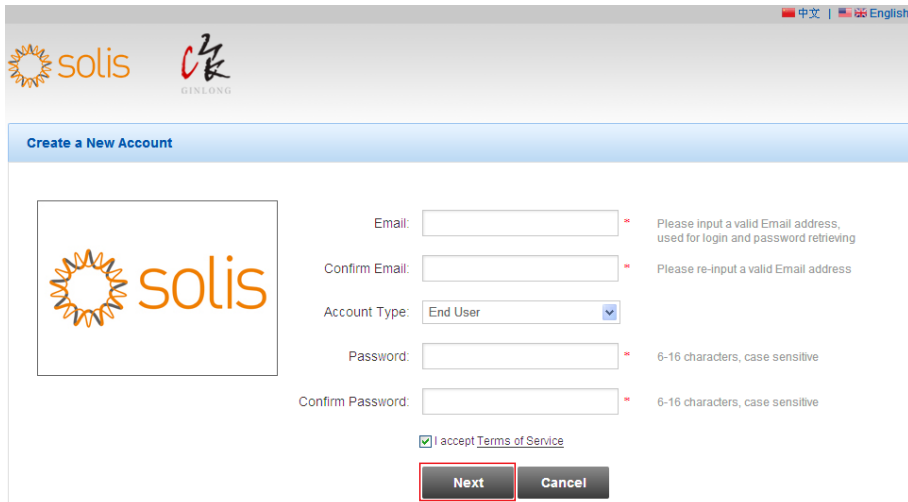
Open a web browser and visit the Ginlongmonitoring website:
<http://www.ginlongmonitoring.com>

Supported browsers: Internet Explorer 8+, Google Chrome 10+,
Firefox 9+, Safari 4+

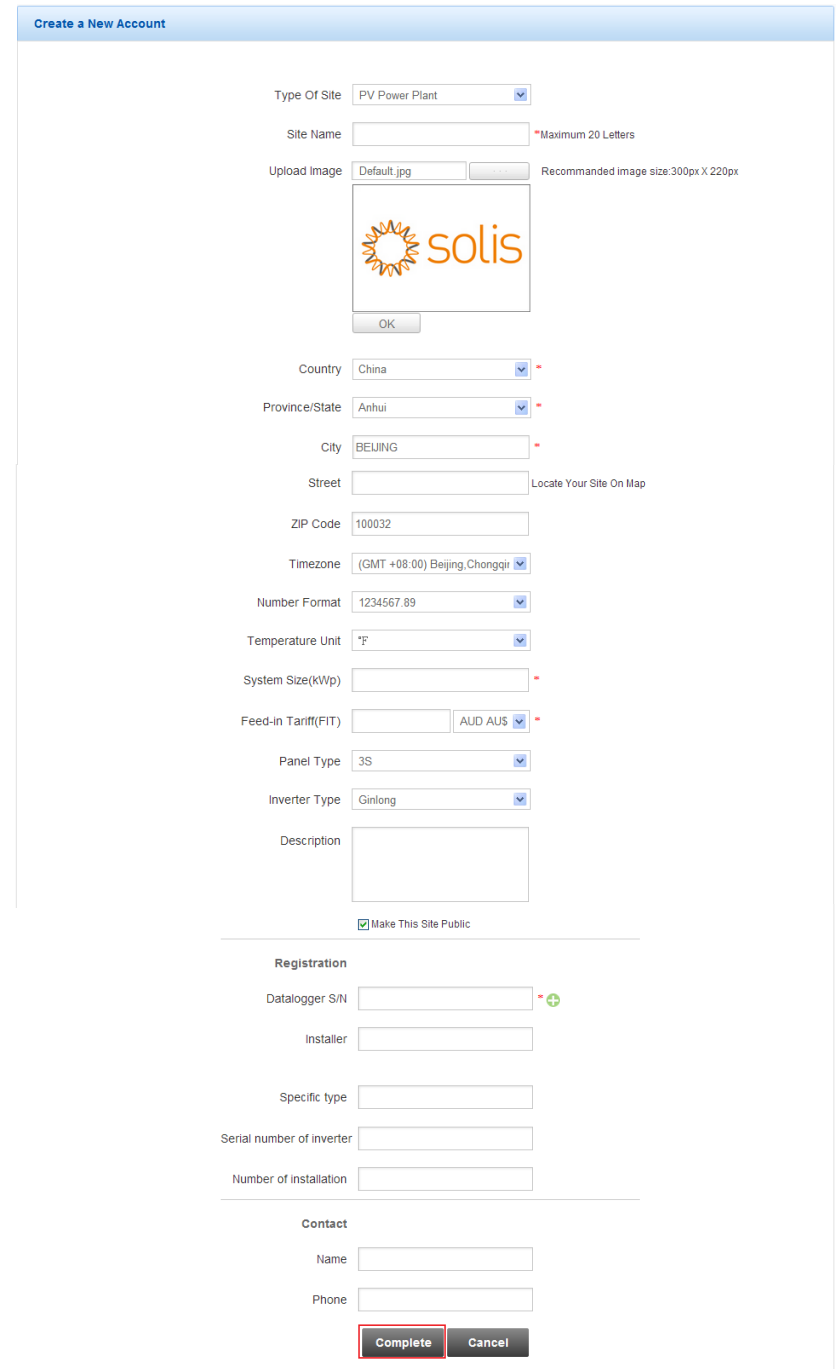
① Click **Register Now**.



② Fill in your email address and password, then click **Next**.



③ Fill in the information as required, then click **Complete**.

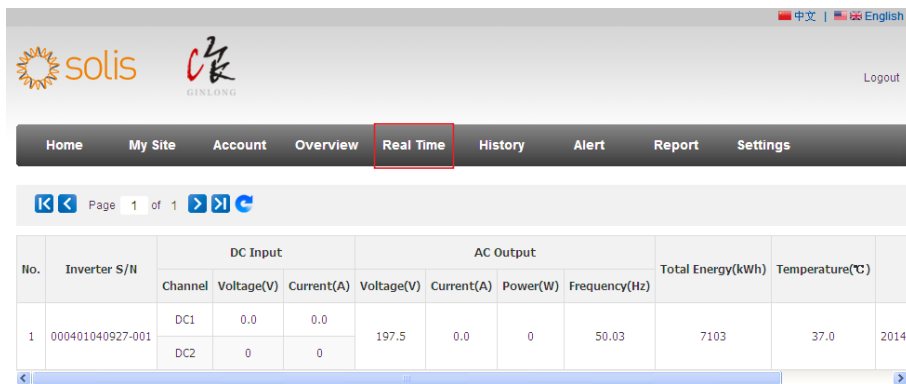


F: Log in Ginlongmonitoring website to manage power station

After successful registration, open the login page of Ginlongmonitoring and input your E-mail and password to access the monitoring system and start monitoring and management of power plants.

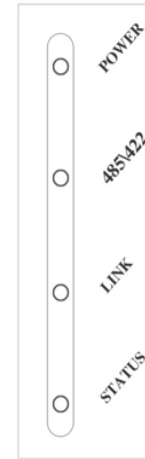


Notice :If users access the monitoring system for the first time within ten minutes after successful registration, please check the " **Real Time** " interface . If there are data shown in the Real Time interface, network setting of data logger and other connection are deemed successful.



G: Trouble shootings

I. LED indication



LEDs	Status	Meaning
POWER	On	Power is normal
	Off	Power is abnormal
485\422	On	Connection between data logger and inverter is normal
	Flashing	Data is transmitting between data logger and inverter
	Off	Connection between data logger and inverter is abnormal
STATUS Off	LINK Flashing	Connecting WiFi
STATUS On	LINK Flashing	Data is transmitting via WiFi
	LINK On	Connection of data logger is normal
	LINK Off	Connection of data logger is abnormal
STATUS Flashing	LINK Flashing	Data is transmitting via port
	LINK On	WiFi in AP mode, a terminal connected
	LINK Off	WiFi in AP mode, no terminal connected

II. Trouble shooting

Phenomenon				Meaning	Solutions
POWER	485/422	LNK	STATUS		
Off	Off	Off	Off	No power supply	Connect power supply and ensure good contacts.
On	Off	X	X	Connection with inverter is abnormal	Check the connection cable, and ensure that the cable order comply with T568B.
					Ensure the stability of RJ-45.
					Ensure that inverter is working under normal condition.
On	X	X	Flashing	In AP mode	Set network.
On	X	Flashing	Off	No WiFi connected to data logger	Check if the antenna is loose or falls off. If so, please screw to tighten.
					Check if the required WiFi is covered.
					Reset data logger and set network again.
On	On	Off	On	Connection to remote server failed	Check if WiFi can connect to Internet
On	Off	Off	Off	System under initialization	Wait for 2 minutes, if no changes occur, reset data logger.
Weak WiFi					Check the connection of antenna
					Add WiFi repeater
					Connect via Ethernet